

## SEQUENCE LISTING

<110> Heichman, Karen  
 Bartel, Paul L.  
 Myriad Genetics, Inc.

<120> Protein-Protein Interactions

<130> Protein Interactions II

<140>

<141>

<150> US 60/130,389

<151> 1999-04-22

<150> US 60/140,693

<151> 1999-06-24

<150> US 60/156,947

<151> 1999-09-30

<150> US 60/168,073

<151> 1999-11-02

<150> US 60/168,376

<151> 1999-12-02

<150> US 60/168,378

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<160> 11

<170> Patent In Ver. 2.0

<210> 1

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<221> Description of Artificial Sequence:tail for PCR primers

<400> 1

ca gaaaca gatatgacca tacagtcagc ggccgccacc

40

<210> 2

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<221> Description of Artificial Sequence:tail for PCR primers

<400> 2

cgcccgagtc ggtggagtg ttatgtcatg cggccgcta

39

<210> 3

<211> 640

<212> DNA

<213> Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (1)..(639)

&lt;400&gt; 3

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Arg Arg Trp Met Arg Ala Glu Pro Cys Leu Pro Gly Pro Ala Cys Pro
      1              5              10              15

gcc ttc tcc gca cac agc tac acc tcc aac ctg ggc gac tac gat gag      96
Ala Phe Ser Ala His Ser Tyr Thr Ser Asn Leu Gly Asp Tyr Asp Glu
      20              25              30

cag gcg ctg ggt atc atg cag acc ctg ggc gtg gac cgg cag agg acg     144
Gln Ala Leu Gly Ile Met Gln Thr Leu Gly Val Asp Arg Gln Arg Thr
      35              40              45

gtg gag tca ctg caa aac agc agg tat aac cac ttt gct gcc att tat     192
Val Glu Ser Leu Gln Asn Ser Ser Tyr Asn His Phe Ala Ala Ile Tyr
      50              55              60

tac ctc ctc ctt gag cgg ctc aag gag tat cgg aat gcc cag tgc gcc     240
Tyr Leu Leu Leu Glu Arg Leu Lys Glu Tyr Arg Asn Ala Gln Cys Ala
      65              70              75              80

cgc ccc ggg cct gcc agc cag ccg cgg cct cgg agc tcg gac ctc agt     288
Arg Pro Gly Pro Ala Arg Gln Pro Arg Pro Arg Ser Ser Asp Leu Ser
      85              90              95

ggc ttg gag gtg cct cag gaa ggt ctt tcc acc gac cct ttc cga cct     336
Gly Leu Glu Val Pro Gln Glu Gly Leu Ser Thr Asp Pro Phe Arg Pro
      100             105             110

gcc ttg ctg tgc cgg cag cgg cag acc ttg gtg cag tcc gtc ctc cag     384
Ala Leu Leu Cys Pro Gln Pro Gln Thr Leu Val Gln Ser Val Leu Gln
      115             120             125

ccc gag atg gac tgt ggc ctc cag agc tcg ctg cag tgg ccc ttg ttc     432
Ala Glu Met Asp Cys Gly Leu Gln Ser Ser Leu Gln Trp Pro Leu Phe
      130             135             140

ttc ccg gtg gat gcc agc tgc agc gga gtg ttc cgg ccc cgg ccc gtc     480
Phe Pro Val Asp Ala Ser Cys Ser Gly Val Phe Arg Pro Arg Pro Val
      145             150             155             160

tcc cca agc agc ctg ctg gac aca gcc atc agt gag gag gcc agg cag     528
Ser Pro Ser Ser Leu Leu Asp Thr Ala Ile Ser Glu Glu Ala Arg Gln
      165             170             175

ggg ccg ggc cta gag gag gag cag gac acg cag gag tcc ctg ccc agc     576
Gly Pro Gly Leu Glu Glu Glu Gln Asp Thr Gln Glu Ser Leu Pro Ser
      180             185             190

agc acg ggc cgg ggg cac acc ctg gcc gag gtc tcc acc cgc ctc tcc     624
Ser Thr Gly Arg Gly His Thr Leu Ala Glu Val Ser Thr Arg Leu Ser
      195             200             205

cca ctc acc ggc cca g
Pro Leu Thr Ala Pro
      210

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&lt;210&gt; 4

&lt;211&gt; 213

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1

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Arg Arg Trp Met Arg Ala Glu Pro Cys Leu Pro Gly Pro Ala Cys Pro
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Ala Phe Ser Ala His Ser Tyr Thr Ser Asn Leu Gly Asp Tyr Asp Glu
          20           25           30
Gln Ala Leu Gly Ile Met Gln Thr Leu Gly Val Asp Arg Gln Arg Thr
          35           40           45
Val Glu Ser Leu Gln Asn Ser Ser Tyr Asn His Phe Ala Ala Ile Tyr
          50           55           60
Tyr Leu Leu Leu Glu Arg Leu Lys Glu Tyr Arg Asn Ala Gln Cys Ala
          65           70           75           80
Arg Pro Gly Pro Ala Arg Gln Pro Arg Pro Arg Ser Ser Asp Leu Ser
          85           90           95
Gly Leu Glu Val Pro Gln Glu Gly Leu Ser Thr Asp Pro Phe Arg Pro
          100          105          110
Ala Leu Leu Cys Pro Gln Pro Gln Thr Leu Val Gln Ser Val Leu Gln
          115          120          125
Ala Glu Met Asp Cys Gly Leu Gln Ser Ser Leu Gln Trp Pro Leu Phe
          130          135          140
Phe Pro Val Asp Ala Ser Cys Ser Gly Val Phe Arg Pro Arg Pro Val
          145          150          155          160
Ser Pro Ser Ser Leu Leu Asp Thr Ala Ile Ser Glu Glu Ala Arg Gln
          165          170          175
Gly Pro Gly Leu Glu Glu Glu Gln Asp Thr Gln Glu Ser Leu Pro Ser
          180          185          190
Ser Thr Gly Arg Gly His Thr Leu Ala Glu Val Ser Thr Arg Leu Ser
          195          200          205
Pro Leu Thr Ala Pro
          210

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<210> 5

<211> 1065

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (2)..(958)

<400> 5

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   1           5           10           15
cta cct ata aat aat gat gat aat tat cac aaa gct gtt tca acg gcc 97
  Leu Pro Ile Asn Asn Asp Asp Asn Tyr His Lys Ala Val Ser Thr Ala
   20           25           30

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aat cca ctg ctt agg ata ttt ata caa aag aag gaa gaa gca gac tac	145
Asn Pro Leu Leu Arg Ile Phe Ile Gln Lys Lys Gln Gln Ala Asp Tyr	
35 40 45	
agt ggc ttt ggt aca gac acg cta ata aag aag aag aat gtt tta acc	193
Ser Ala Phe Gly Thr Asp Thr Leu Ile Lys Lys Lys Asn Val Leu Thr	
50 55 60	
aac gta ttg cgt cct gac aac cat aga aaa aap cca cat ata gtc att	241
Asn Val Leu Arg Pro Asp Asn His Arg Lys Lys Pro His Ile Val Ile	
65 70 75 80	
agt atg ccc caa gac ttt aga cca gtg tct tct att ata gac gtg gat	289
Ser Met Pro Gln Asp Phe Arg Pro Val Ser Ser Ile Ile Asp Val Asp	
85 90 95	
att ctc cca gaa acg cat cgt agg gta cgt ctt tac aaa tac ggc agg	337
Ile Leu Pro Glu Thr His Arg Arg Val Arg Leu Tyr Lys Tyr Gly Thr	
100 105 110	
gag aaa ccc cta gga ttc tac atc cgg gat ggt tcc agt gtc agg gta	385
Glu Lys Pro Leu Gly Phe Tyr Ile Arg Asp Gly Ser Ser Val Arg Val	
115 120 125	
aca cca cat ggc tta gaa aag ttt cca agg att ttt ata tcc agc ctt	433
Thr Pro His Gly Leu Glu Lys Val Pro Gly Ile Phe Ile Ser Arg Leu	
130 135 140	
gtc cca gga ggt ctg gct caa agt asa aga cta tta gct gtt aat gat	481
Val Pro Gly Gly Leu Ala Gln Ser Thr Gly Leu Leu Ala Val Asn Asp	
145 150 155 160	
gaa gtt tta gaa gtt aat ggc ata gaa gtt tcc ggt aag agc ctt gat	529
Glu Val Leu Glu Val Asn Gly Ile Gln Val Ser Gly Lys Ser Leu Asp	
165 170 175	
caa gta aca gac atg atg att cca aat agc cgt aac ctc atc ata asa	577
Gln Val Thr Asp Met Met Ile Ala Asn Ser Arg Asn Leu Ile Ile Thr	
180 185 190	
gtg aga ccg gca aac cag agg aat aat ttt gtg agt aac agt cgg aat	625
Val Arg Pro Ala Asn Gln Arg Asn Asn Val Val Arg Asn Ser Arg Thr	
195 200 205	
tct ggc agt tcc ggt cag tct cct gat aac agt ctt ctt ggc cac cca	673
Ser Gly Ser Ser Gly Gln Ser Thr Asp Asn Ser Leu Leu Gly Tyr Pro	
210 215 220	
cag cag att gaa cca agc ttt gag cca gag gat gaa gag agc gaa gaa	721
Gln Gln Ile Glu Pro Ser Phe Gln Pro Gln Asp Gln Asp Ser Gln Gln	
225 230 235 240	
gat gac att atc att gaa gac aat gga gtg cca cag cag att cca aaa	769
Asp Asp Ile Ile Ile Glu Asp Asn Gly Val Pro Gln Gln Ile Pro Lys	
245 250 255	
gct gtt cct aat act gag agc atg gag tca tta aca cag ata gag cta	817
Ala Val Pro Asn Thr Glu Ser Leu Gln Ser Leu Thr Gln Ile Glu Leu	
260 265 270	
aga ttt gag tct gga cag aat agt ttt att ccc tct aat gaa gtg agc	865
Ser Phe Glu Ser Gly Gln Asn Gly Phe Ile Pro Ser Asn Glu Val Ser	
275 280 285	

ttt gca gcc ata gca agc agc tca aac atg gaa ttt gaa aca cat gct 913  
 Leu Ala Ala Ile Ala Ser Ser Ser Asn Thr Glu Phe Glu Thr His Ala  
 290 295 300

cca gat caa aaa ctc tta gaa gaa gat gga aca atc ata aca tta 958  
 Pro Asp Gln Lys Leu Leu Glu Glu Asp Gly Thr Ile Ile Thr Leu  
 305 310 315

tgaaaccgtg gtttgaatgt tttcagagtg aggatgccat gaggacttgt acatttggt 1018  
 agtttaggcc aatgttgacg ttttggtagg ctatgcagac atccatg 1065

<210> 6  
 <211> 319  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Ala Asn Val Asp Val Leu Val Gly Tyr Ala Asp Ile His Gly Asp Leu  
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Leu Pro Ile Asn Asn Asp Asp Asn Tyr His Lys Ala Val Ser Thr Ala  
 20 25 30

Asn Pro Leu Leu Arg Ile Phe Ile Gln Lys Lys Glu Glu Ala Asp Tyr  
 35 40 45

Ser Ala Phe Gly Thr Asp Thr Leu Ile Lys Lys Lys Asn Val Leu Thr  
 50 55 60

Asn Val Leu Arg Pro Asp Asn His Arg Lys Lys Pro His Ile Val Ile  
 65 70 75 80

Ser Met Pro Gln Asp Phe Arg Pro Val Ser Ser Ile Ile Asp Val Asp  
 85 90 95

Ile Leu Pro Glu Thr His Arg Arg Val Arg Leu Tyr Lys Tyr Gly Thr  
 100 105 110

Glu Lys Pro Leu Gly Phe Tyr Ile Arg Asp Gly Ser Ser Val Arg Val  
 115 120 125

Thr Pro His Gly Leu Glu Lys Val Pro Gly Ile Phe Ile Ser Arg Leu  
 130 135 140

Val Pro Gly Gly Leu Ala Gln Ser Thr Gly Leu Leu Ala Val Asn Asp  
 145 150 155 160

Glu Val Leu Glu Val Asn Gly Ile Glu Val Ser Gly Lys Ser Leu Asp  
 165 170 175

Gln Val Thr Asp Met Met Ile Ala Asn Ser Arg Asn Leu Ile Ile Thr  
 180 185 190

Val Arg Pro Ala Asn Gln Arg Asn Asn Val Val Arg Asn Ser Arg Thr  
 195 200 205

Ser Gly Ser Ser Gly Gln Ser Thr Asp Asn Ser Leu Leu Gly Tyr Pro  
 210 215 220

Gln Gln Ile Gln Pro Ser Phe Glu Pro Glu Asp Glu Asp Ser Glu Glu  
 225 230 235 240

Asp Asp Ile Ile Ile Glu Asp Asn Gly Val Pro Gln Gln Ile Pro Lys  
 245 250 255

Ala Val Pro Asn Thr Glu Ser Leu Glu Ser Leu Thr Gln Ile Glu Leu  
 260 265 270

Ser Phe Glu Ser Gly Gln Asn Gly Phe Ile Pro Ser Asn Glu Val Ser  
 275 280 285

Leu Ala Ala Ile Ala Ser Ser Ser Asn Thr Glu Phe Glu Thr His Ala  
 290 295 300

Pro Asp Gln Lys Leu Leu Glu Glu Asp Gly Thr Ile Ile Thr Leu  
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<210> 7

<211> 861

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(861)

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gtc atc cag gga ctg gag act ctg cgt ggg gag cat cgt gcc ctg ctg 96  
 Val Ile Gln Gly Leu Glu Thr Leu Arg Gly Glu His Arg Ala Leu Leu  
 20 25 30

gct cct ctg gtt gca cct gag gcc ggc gaa gcc gag cct ggc tgg cag 144  
 Ala Pro Leu Val Ala Pro Glu Ala Gly Glu Ala Glu Pro Gly Ser Gln  
 35 40 45

gag cgc tgc atc ctc ctg cgt cgc tcc ctg gaa gcc att gag ctt ggg 192  
 Glu Arg Cys Ile Leu Leu Arg Arg Ser Leu Glu Ala Ile Glu Leu Gly  
 50 55 60

ctg ggg gag gcc cag gtg atc tgg gca ttg tgg agc cac ctg ggg gct 240  
 Leu Gly Glu Ala Gln Val Ile Leu Ala Leu Ser Ser His Leu Gly Ala  
 65 70 75 80

gta gaa tca gag aag cag aag ctg cgg gcc cag gtg cgg cgt ctg gtg 288  
 Val Glu Ser Glu Lys Gln Lys Leu Arg Ala Gln Val Arg Arg Leu Val  
 85 90 95

cag gag aac cag tgg ctg cgt gag gag ctg ccg ggg aca cag cak aag 336  
 Gln Glu Asn Gln Trp Leu Arg Glu Glu Leu Pro Gly Thr Gln Xaa Lys  
 100 105 110

ctg cag cgc agt gag cag gcc gtg gcc cag ctc gag gag gag aag cag 384  
 Leu Gln Arg Ser Glu Gln Ala Val Ala Gln Leu Glu Glu Glu Lys Gln  
 115 120 125

cac tgg ctg ttc atg arc cag atc cgc agt tgg atg aag acg cct ycc 432  
 His Leu Leu Phe Met Xaa Gln Ile Arg Ser Trp Met Lys Thr Pro Xaa  
 130 135 140

cta acc agg aga agg ggg acg tcc cca aag aca cac tgg atg acc tgt 480  
 Leu Thr Arg Arg Arg Gly Thr Ser Pro Lys Thr His Trp Met Thr Cys  
 145 150 155 160

tcc aca atg agg atg agc aga gcc cag ccc cta gcc cag gag gag ggg 528  
 Ser Pro Met Arg Met Ser Arg Ala Gln Pro Leu Ala Gln Glu Glu Gly  
 165 170 175

ang tgt ctg gtc agc atg ggg gat acg aga tcc cgg ccc ggc tcc gca 536  
 Met Gly Leu Val Ser Met Gly Asp Thr Arg Ser Arg Pro Gly Ser Ala  
 180 185 190

ccc tgg aca act ggt gat cca ata cgc ctc aca ggg cgg cta cga ggt 634  
 Pro Gly Thr Thr Gly Asp Pro Ile Arg Leu Thr Gly Pro Leu Arg Gly  
 195 200 205

agc tgt gcc act ctg aac gca ggc act cga aga atg gag aag aag tca 632  
 Ser Gly Ala Thr Leu Gln Ala Gly Thr Arg Arg Leu Glu Lys Thr Ser  
 210 215 220

ggc aac gac cac cct gac gtt gcc aac atg ctg aac atc ctg gca ctg 720  
 Gly His Asp His Pro Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu  
 225 230 235 240

gtc tat cgg gat gag aac aag tac aag gag gct gcc cac ctg ctc aat 768  
 Val Tyr Arg Asp Gln Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn  
 245 250 255

gat cct ctg gcc ctc cgg gag aac aca ctg ggc aag gac cac cca gcc 816  
 Asp Ala Leu Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp His Pro Ala  
 260 265 270

ggg gcc ggc aca cta aac aac ctg gta gtc ctg tat agc gca gag 861  
 Val Ala Ala Thr Leu Asn Asn Leu Ala Val Leu Tyr Ser Ala Glu  
 275 280 285

CH10: 4

CH11: 187

CH12: PRT

CH13: Homo sapiens

1400: 4

Arg Glu Glu Lys Leu Ser Gln Asp Glu Ile Val Leu Gly Thr Lys Ala  
 1 5 10 15

Val Ile Gln Gly Leu Glu Thr Leu Arg Gly Glu His Arg Ala Leu Leu  
 20 25 30

Ala Pro Leu Val Ala Pro Glu Ala Gly Glu Ala Glu Pro Gly Ser Gln  
 35 40 45

Glu Arg Cys Ile Leu Leu Arg Arg Ser Leu Glu Ala Ile Glu Leu Gly  
 50 55 60

Leu Gly Glu Ala Gln Val Ile Leu Ala Leu Ser Ser His Leu Gly Ala  
 65 70 75 80

Val Glu Ser Glu Lys Gln Lys Leu Arg Ala Gln Val Arg Arg Leu Val  
 85 90 95

Gln Glu Asn Gln Trp Leu Arg Glu Glu Leu Pro Gly Thr Gln Asn Lys  
 100 105 110

Leu Gln Arg Ser Glu Gln Ala Val Ala Gln Leu Glu Glu Glu Lys Gln  
 115 120 125

His Leu Leu Phe Met Xaa Gln Ile Arg Ser Trp Met Lys Thr Pro Xaa  
 130 135 140  
 Leu Thr Arg Arg Arg Gly Thr Ser Pro Lys Thr His Trp Met Thr Cys  
 145 150 155 160  
 Ser Pro Met Arg Met Ser Arg Ala Gln Pro Leu Ala Gln Glu Glu Gly  
 165 170 175  
 Met Cys Leu Val Ser Met Gly Asp Thr Arg Ser Arg Pro Gly Ser Ala  
 180 185 190  
 Pro Cys Thr Thr Gly Asp Pro Ile Arg Leu Thr Gly Pro Leu Arg Gly  
 195 200 205  
 Ser Cys Ala Thr Leu Gln Ala Gly Thr Arg Arg Leu Glu Lys Thr Ser  
 210 215 220  
 Gly His Asp His Pro Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu  
 225 230 235 240  
 Val Tyr Arg Asp Gln Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn  
 245 250 255  
 Asp Ala Leu Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp His Pro Ala  
 260 265 270  
 Val Ala Ala Thr Leu Asn Asn Leu Ala Val Leu Tyr Ser Ala Glu  
 275 280 285

<210> :  
 <211> : 601  
 <212> : DNA  
 <213> : Homo sapiens

<220> :  
 <221> : CDS  
 <222> : 1)..(264)

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 1 5 10 15  
 agg aag aag gaa agt aag gac att gcc agc aaa tat ctt aca tct cat 96  
 Arg Lys Lys Glu Ser Lys Asp Ile Ala Ser Lys Tyr Leu Thr Ser His  
 20 25 30  
 cag cct ata ctg tgt ctg ctg acc act cct aac tcc aaa gga tgc tgg 144  
 Gln Pro Ile Leu Cys Leu Leu Thr Thr Pro Asn Cys Lys Gly Cys Trp  
 35 40 45  
 gaa aag aag agc att gta gct ttt cca gcc tct gag gta ggc gca gat 192  
 Glu Lys Lys Ser Ile Val Ala Phe Pro Ala Ser Val Val Gly Ala Asp  
 50 55 60  
 aag gaa tta gag ttg ggt gtt att gaa tca atg tat cag aca ctt ctg 240  
 Lys Gly Leu Glu Leu Gly Val Thr Glu Ser Met Tyr Gln Thr Leu Leu  
 65 70 75 80  
 agt cag gct aga gcc aga ttt acc tagattttagc aggaaaagta tgtttcttttc 294  
 Ser Gln Ala Arg Ala Arg Phe Asn  
 85



acotgcatgt aatgaaggaa atctatgtcc ttcatacact taataaacct gtaagtctct 354  
 actatgggca ggtactgtgc tagctagaca ttacaatgtg tgggggcaga cacaaagatg 414  
 ggaacagtag acaactggga accctagagg ggggaggttg ggagtagggg aagggttgaa 474  
 aaatgattgg gtactatgct cactacctgg gtgatgggat catttgtaca ccaaagcca 534  
 gcaacacaca atttaccgt gtaacacacc ggcacgtga cccctgaac ctaagatgaa 594  
 agccgaa 601

<210> 10  
 <211> 88  
 <212> PRT  
 <213> Homo sapiens

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 Arg Lys Lys Glu Ser Lys Asp Ile Ala Ser Lys Tyr Leu Thr Ser His  
 20 25 30  
 Gln Pro Ile Leu Cys Leu Leu Thr Thr Pro Asn Cys Lys Gly Cys Trp  
 35 40 45  
 Glu Lys Lys Ser Ile Val Ala Phe Pro Ala Ser Val Val Gly Ala Asp  
 50 55 60  
 Lys Gly Leu Glu Leu Gly Val Thr Glu Ser Met Tyr Gln Thr Leu Leu  
 65 70 75 80  
 Ser Gln Ala Arg Ala Arg Phe Asn  
 85